

## **EXHIBIT 2**

## The Washington Post

*Democracy Dies in Darkness*

# Don't want Google tracking you? You have almost no choice, according to a study.

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Google's sweeping capability to collect data makes it nearly impossible to escape the tech giant in the course of normal online activity, according to a study published Tuesday.

The [55-page study](#), led by Vanderbilt University computer science professor Douglas C. Schmidt, said that an idle smartphone running Google's Android operating system with its Chrome browser open sends data to Google's servers as often as 14 times an hour. And while not using Google's devices or services limits data collection, the dominance of Google's advertising network makes it highly difficult to prevent Google from collecting some data, the study also highlights.

It provides a broad look at the multiple aspects of Google's techniques for collecting data, both through its services such as Maps, Hangouts chat and YouTube as well as through its DoubleClick Ad Network. The study was paid for by Digital Content Next, a lobbying group that represents the digital publishing industry — [The Washington Post](#) is a member — and is a frequent critic of Google. The group has previously criticized Google for its lack of moderation [on YouTube](#) as well as the company's dominance, with Facebook, of the [online advertising industry](#).

"These products are able to collect user data through a variety of techniques that may not be easily graspable by a general user," Schmidt wrote in the paper's conclusion. "A major part of Google's data collection occurs while a user is not directly engaged with any of its products."

Google, in a statement, questioned the study's credibility.

"This report is commissioned by a professional DC lobbyist group, and written by a witness for Oracle in their ongoing copyright litigation with Google. So, it's no surprise that it contains wildly misleading information," the company said.

The report comes as Google faces increased scrutiny over how it collects location information, following an [Associated Press investigation](#) that revealed turning off the "location history" setting did not stop all location data collection. Two men in California filed lawsuits after the report, [Ars Technica](#) reported, alleging that Google had misled them about the extent of its tracking.

Schmidt found that two-thirds of the data Google collected from a smartphone during a 24-hour mock “day in the life” period was through passive means, meaning it was not volunteered by a person. He also said he found evidence that Google has the capability to link anonymized data with information from people’s Google accounts while they are signed out from their Google accounts or using a private browsing mode — called “incognito mode” — on Google’s Chrome browser. The study also claims Google can link anonymized data collected by advertising cookies to people’s Google accounts. Google makes the bulk of its money from advertising, which accounted for 86 percent of its revenue in its second-quarter earnings report.

When asked for specific points that are misleading in the Vanderbilt study, Google directed The Post to its descriptions of how incognito mode and the Chrome browser record and track information, saying it does not link anonymous activity with people’s Google accounts once they sign in. In the case of private browsing, information is deleted when someone turns the mode off.

Google also said it does not link anonymized data collected from advertising cookies with users' accounts.